
Meridian 1

Meridian 1 capacity engineering

Document Number: 553-3001-149

Document Release: Standard 9.00

Date: October 1997

© 1992, 1997

All rights reserved

Printed in the United States of America

Information is subject to change without notice. Northern Telecom reserves the right to make changes in design or components as progress in engineering and manufacturing may warrant. This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules, and the radio interference regulations of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

SL-1 and Meridian 1 are trademarks of Northern Telecom.

Revision history

December 31, 1992

Standard, release 1.00. This is the first issue of this document. It replaces 553-2201-151 Appendix 1.

April 1, 1993

Standard release 2.00.

August 1, 1993

Standard release 3.00.

December 1994

Standard, release 4.00. Reissued to include editorial changes and indexing. Due to the extent of the changes, revision bars are not used.

July 1995

Standard, release 5.00.

December 1995

Standard, release 6.00.

August 1996

Standard, release 7.00. This document is reissued for X11 Release 22.

August 1996

Standard, release 8.00. This document is up-issued for X11 Release 22. Revisions are documented using change bars.

October 1997

Standard, release 9.00. Changes are noted by revision bars in the margin.

Contents

Introduction	1
Purpose	1
Scope	2
Audience	3
How to use this document	3
Other resources	6
System architecture	9
Common equipment	11
Network equipment	17
Peripheral equipment	18
Terminal equipment	21
Power equipment	24
System capacities	29
Hardware	29
Network traffic	54
Memory size	89
Mass storage size	115
Application engineering	135
Remote Virtual Queuing (RVQ) (available with X11 release 18 and later)	135
Meridian Mail (MM)	142

Meridian Link	145
Configuration Parameters	172
Multi-purpose serial data link	173
Overview	174
MSDL Architecture	175
DCH	176
AML	188
SDI	192
MSDL Engineering Procedure	197
Examples	205
CLASS network engineering rules	211
Meridian 1 multi-group network	212
General Engineering Guidelines	219
Worksheets	231
Network loop traffic capacity worksheet	232
Option 11 Card Slot Calculation	233
Physical Slot Calculation Example	234
Physical capacity worksheets	235
Processor load worksheet	238
Memory size worksheet	248
Mass Storage size worksheet	279
Design parameters	283
System parameters	283
Customer parameters	284
Console and telephone parameters	285
Trunk and route parameters	286
ACD feature parameters	287
Special feature parameters	288

Hardware and capacity parameters	290
Memory related parameters	291
Glossary	293

